

# The FO and His PLGR in the Close Fight

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One of the most difficult tasks for a forward observer (FO) is to accurately and rapidly initiate indirect fires during the close fight to fix and finish the enemy. This is particularly difficult in rough terrain in which boundaries are not identifiable, visibility is limited and the rules of engagement (ROE) are restrictive—a common scenario at the Joint Readiness Training Center (JRTC), Fort Polk, Louisiana.

The most common problem FOs have in initiating fires is rapidly determining an accurate target location. Consequently, indirect fires are seldom used in the close fight because of fear of fratricide or excessive collateral damage or, if used, seldom are effective.

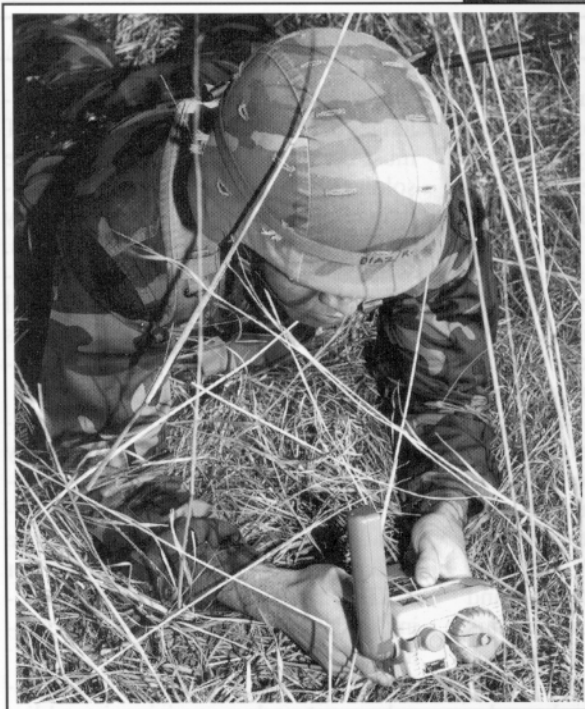
This hesitation to make the most of fires in the close fight is a major factor in the disproportionate casualty rate between blue force (BLUEFOR) and opposing force (OPFOR) units observed at the JRTC—clearly, the BLUEFOR misses indirect fire opportunities in the close fight. (See the article “Fast, Accurate Fires in the Close Fight” by Lieutenant Colonel David L. Anderson in March-April 1996.).

A key piece of equipment owned by FOs throughout the Army is the precision lightweight global positioning system receiver (PLGR). This device enables observers to rapidly, accurately determine a target location, even under challenging conditions, such as those at the JRTC.

Many fire supporters are technically proficient with the PLGR; however, few are tactically proficient. This article focuses on tactical proficiency with the PLGR. It also suggests some home station training techniques to build the FO's PLGR experience and confidence in the close fight.

## Employing the PLGR

The PLGR can give FOs, platoon leaders and company commanders the confidence to rapidly call for indirect fires, any time, regardless of the terrain. Fire



Using his PLGR, the FO rapidly determines his location before initiating a call for fire.

(Photo by Linda A. Young, Fort Sill TSC)

support officers (FSOs) and observers, including those in the fire support teams (FISTs), firepower control teams (FCTs), enlisted terminal attack controllers (ETACs) and combat observation lasing teams (COLTs), must maximize the PLGR's capabilities.

During a movement-to-contact (approach march technique or search-and-attack technique), FOs walking with their platoons must be prepared to request and adjust indirect fires quickly and accurately when the platoon makes contact. The following is a simple call-for-fire (CFF) technique that only slightly modifies the technique in *FM 6-30 Observed Fire Procedures*. For this technique to be effective, certain actions must occur during troop leading procedures (see the figure on Page 26).

Before leaving the assembly area or patrol base, the FO confirms his PLGR

works and positions it on his load bearing equipment (LBE) so he can read the screen at a glance. The “automatic off” function should be off so PLGR data will be readily available. He removes his compass from its pouch and has it available. He also calls his fire support asset personnel to lay on the first target planned along the route.

The FO switches the PLGR to the navigation (NAV) function and double checks the direction and distance to the planned target with his map. Although, he relies on the PLGR, it's critical for him to spot-check the accuracy of the PLGR data with his map frequently.

Once the FO begins moving with the platoon, he must be prepared to initiate a CFF immediately. FOs miss many opportunities because they aren't mentally prepared to initiate a CFF when the platoon makes contact with the enemy. From the moment the FO begins moving with his platoon, he must constantly think



Photo by Raymond Bernard, JRTC

this point, the FO's priority must be getting rounds downrange.

This polar plot technique is superior to other methods of locating targets because the FO relies on the FDC to determine the grid to the target. Although polar plot is the quickest method, it's not often used in mobile situations in restrictive terrain because of the difficulties of self location. Instead, FOs attempt to determine a target location using terrain association with a map or adjusting from a planned target—extremely difficult tasks in restrictive terrain, particularly during darkness and adverse weather conditions.

FOs tend not to have confidence in the results of those difficult tasks and miss opportunities to use indirect fires in the close fight. The fear of fratricide prevails. Equally important, because of the poor results of missions using the more difficult target-location methods, many maneuver commanders also have lost confidence in the ability of indirect fires to support close contacts.

The technique suggested in this article takes advantage of two types of equipment designed to increase the accuracy of fires: a fire direction computation computer—such as a lightweight computer unit (LCU), battery computer system (BCS) or mortar ballistic computer (MBC)—and a PLGR. When the FO determines a direction of 4,150 mils and a distance of 300 meters, the FDC inputs this information into the computer, which produces a 10-digit grid. The alternative is the FO's determining a grid with a map and an observed fire (OF) fan on the move—a difficult task, especially during hours of limited visibility.

If necessary and time permitting, the FO may use the PLGR to determine the target grid based upon direction and distance from his current location. This is a useful method when the FO has time

what his actions will be if the platoon makes contact. Although this article suggests what his actions should be, there's no substitute for the quick thinking and initiative of a highly trained observer.

**Actions Upon Contact.** As soon as the lead element of the platoon makes contact, the FO immediately takes cover

FSO begins clearing a 400-meter area around the target grid. Once the FSO hears the FO's CFF, he requests permission from the commander to fire.

The fire direction center (FDC) for mortars or Field Artillery reads back the FO's initial report and prepares for a fire mission using polar plot data. As

## Fire Planning

- Plan targets along the intended route.
- Establish a net to talk directly to an indirect fires asset.
- Identify a dedicated asset to lay on priority targets.
- Identify what actions are expected upon contact with each high-payoff target.
- Confirm the standing operating procedures (SOP) for immediate suppression missions with each asset supporting the company.

## Troop Leading Procedures

- Rehearse the modified call-for-fire with the asset.
- Rehearse the planned targets along the route with the fire direction center (FDC).
- Conduct radio checks with the FDC and the company and battalion fire support officers (FSOs).
- Conduct pre-combat checks with the precision lightweight global positioning system receiver (PLGR).
- Rehearse the platoon battle drill "React to Contact," including the forward observer's (FO's) actions.
- Load planned targets as way points into the PLGR.

During movement-to-contact, the FO walking with his platoon must be prepared to request and adjust indirect fires quickly and accurately when the platoon makes contact. To make the most of his fires, he must follow the fire planning and troop leading procedures outlined here.

the direction to the target (AZ) and the estimated target altitude/elevation (EL). Then the observer presses the down arrow (#5 key) and the PLGR calculates the grid.

When the FO is in contact and the platoon is attempting to fix the enemy, the FO doesn't have time to lase a target or input data into the PLGR. The better choice at that point is to let the FDC use its fire direction computer (LCU, BCS or MBC) to determine the target's location. Using polar plot data in conjunction with the PLGR will get the rounds downrange quicker and won't sacrifice accuracy.

**Planned Targets.** The primary use of planned targets in this technique is to allow the firing asset to follow the element as it moves to its march order objective or through its sector. The reality is that determining exactly where the planned target is on the ground, even with the PLGR, is difficult, and the enemy seldom appears during chance contact where a planned target is. That fact helps to make the FO's job of trying to determine the shift from a known point (planned target) during contact in 25 seconds or less formidable.

But planned targets are still useful. By using planned targets along the route, the FO ensures the asset supporting the platoon is ready and able to provide fires when needed. The asset lays on the planned targets, ensuring it can range them. Then the asset only will have to make minor deviation and quadrant/elevation changes when the FO sends in his CFF, increasing the responsiveness of fires.

The FO may fire planned targets when the situation is right. The PLGR can help him determine where the planned target is in relationship to "ground truth." It's important to keep in mind that the six-digit grid the asset has for the planned target may be quite different than the target's actual grid. The FO must take this difference into account when firing planned targets and send refinements, as necessary. This is especially important during the close fight. The difference between the previously planned and actual target grids reinforces the use of the FDC polar plot method when the platoon is in contact.

## PLGR Home Station Training

Success with the PLGR requires home station training. Calling for fire from an observation post (OP) or training with a training set fire observation (TSFO) is helpful but limited in its application to actual combat situations. In combat, the FO will have to quickly locate a moving target, one that's likely to be maneuvering on the platoon. He won't have a terrain sketch or be standing protected in a hole or a bunker.

All FO training should be based on this question: "How will this training prepare my FOs for the tasks they must accomplish with their platoons?" If the answer is "It won't," then the response is, "How can I modify the training to make it applicable?"

One method to train on PLGR techniques is simple and requires few resources yet fully integrates fire support into the platoon's training, particularly the company and battalion mortar FDCs. The unit establishes lanes for the platoon to maneuver in restrictive terrain. A small OPFOR with a PLGR-equipped firemarker team initiates contacts. When the platoon makes contact, the FO calls for fire, employing the polar plot procedures for target location. A controller with the mortars asks what grid is being shot (based on the FO's polar plot data) and relays the grid to the firemarker with the OPFOR, who then marks the fires with an artillery simulator. Both the platoon and FO can continue until the OPFOR is neutralized.

Units can conduct this training with or without an infantry platoon. This training is cost-effective and easily can be conducted in varied locations to challenge FOs in new terrain.

The FO is the critical player in providing responsive indirect fires during the close fight. Our FOs must overcome their hesitancy to initiate calls-for-fire in restrictive terrain upon contact. They must regain the confidence of their platoon leaders and company commanders by providing fast, accurate fires—regardless of the conditions. The PLGR can help significantly.



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